

Business and Technical Operations

Overview

The strategy for establishing the foundation for the Arkansas State Health Alliance for Records Exchange (SHARE) is to develop operational components that will enable healthcare providers in the state to achieve meaningful use of electronic medical records (EHR). By establishing guiding principles for the functionality of the HIE and defining the shared services which will be provided through the proposed system, the Arkansas HIE will be deployed in a staged process in order to launch a viable and sustainable HIE system. Building on existing state Health Information Technology (HIT) infrastructure currently available in the state will maximize the utilization of resources available to establish the Arkansas HIE.

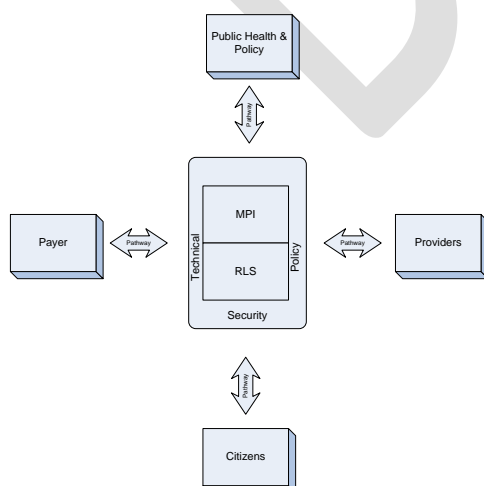
Operational Responsibilities

The Arkansas Office of HIT will be established and administratively housed in the Arkansas Department of Finance and Administration, which serves as the State Designated Entity (SDE) for the Arkansas State Health Information Exchange Cooperative Agreement Program. The Office will be led by the State Health Information Technology Coordinator, appointed by the Governor of Arkansas and house the Arkansas Health Information Exchange (SHARE). As the office is established, the HIT Coordinator will ensure that all transition activities are conducted to complete the evolution of the office into an operational entity. The early stages of the HIE, focusing on technical development, education awareness and integration into the Arkansas health care, will require a combination of leadership and administrative responsiveness to public goals and the individual stakeholder needs. This will be achieved through continued coordination at the direction of the state's HIT coordinator and managed through the Office of HIT.

Meeting Meaningful Use Requirements

The Arkansas SHARE will be developed and deployed in a staged process, with meaningful use as the guidepost for the required milestones. By developing a fundamental business model, the functionality of the HIE and the stakeholders were identified in order to identify where resources are available or lacking.

Proposed Basic Health Information Exchange Business Model



This model identifies functional components necessary for the execution of a successful HIE. The incorporation of a Master Patient Index (MPI) is required in order to perform patient reconciliation and a record locator service is necessary for the identification of location of patient records. An additional utility of the HIE is the incorporation of the appropriate security and authorization protocols necessary to ensure data security.

With the adoption of this model, the currently defined meaningful use criteria was adopted as the initial phases of the HIE with stage 1 criteria as the target. The requirements of the eligible professionals (EPs) and

hospitals were evaluated to ensure that the necessary elements were incorporated as well as the appropriate entity or stakeholder identified as a participant of the HIE system.

To demonstrate meaningful use functionality, a pilot approach will be adopted by connecting existing Arkansas medical providers with implemented electronic medical records systems. To determine the meaningful use functionality within a hospital setting, the HIE System's approach will be to select two hospitals with existing electronic medical records. Key to this is the selection hospitals located in diverse geographic regions, already linked to area clinics, labs and their pharmaceutical providers. To ensure maximization of the infrastructure, the next step will bring in a community health clinics and public health entities existing resources.

A scheduled phased approach will be adopted in order to ensure viability and data quality of the HIE. A determination of shared services along with a timeline for the phased approach to incorporate these services into the HIE will be developed for execution during implementation. Appropriate assessment and evaluation will be developed and utilized in order to develop success and failure criteria during the piloted phases. Operational and project assessments will be executed throughout the operational phases of the HIE system development and appropriate next steps will be determined and/or implemented.

Coordination with Medicaid and Public Health

Medicaid

There are multiple synergistic opportunities for the Arkansas State Medicaid, the Division of Medical Services at the Arkansas Department of Human Services, and the Arkansas Health Information Exchange. These opportunities will ensure that the proposed HIE activities are consistent with and enable implementation of the Medicaid meaningful EHR use incentives. The ultimate goals of this provision are to 1) promote healthcare quality and 2) promote health information exchange through the use of certified EHR technology.

The level of Medicaid agency involvement with the statewide HIE is also likely to increase substantially over time. Medicaid business processes also will need to align with the capabilities of the statewide HIE to support interoperability within a transformed medical business model. There are three key areas where Medicaid and statewide HIE objectives overlap to a significant degree:

- **Provider Subsidy Administration:** State Medicaid agencies are responsible for the administration of a federally funded incentive to providers to adoption Electronic Health Record (EHR) systems. Medicaid or a designated entity will require an audit and verification that providers who received subsidies are transforming their medical practice and using improved business processes. There is an expectation that practice improvements are expected to increase quality of care, improve outcomes, and increase efficiency of service utilization.

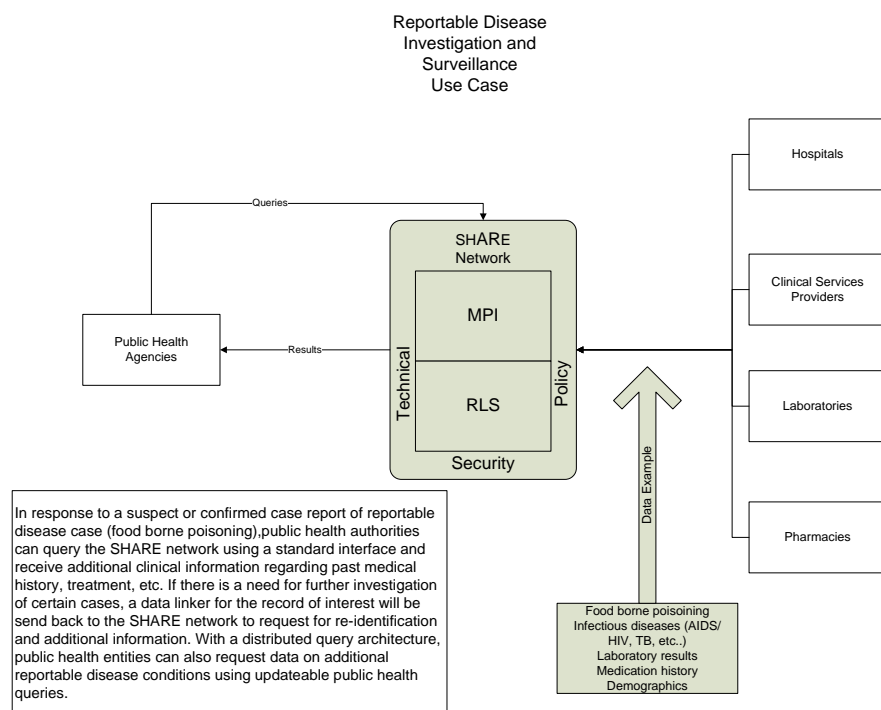
- **Medicaid Payment Reform:** Medicaid has an opportunity through payment reform to pay for performance, including changing reimbursement based on outcomes measurement and adoption of coordinated care approaches such as patient centered medical homes.
- **Clinical Data for Care Management in MMIS:** Medicaid Information Technology Architecture (MITA) is designed to accommodate the adoption and use of clinical data in MMIS at MITA Maturity Level 4. Clinical data is needed to support disease and case management, referral monitoring, and to improve screening and effectiveness of follow up treatments. In addition, clinical data can support improvements in prior authorization and improved program integrity and program compliance with evidence based treatment protocols. Medicaid programs have already begun to evolve through MITA, into a business model that requires connectivity and interoperability with providers, and eventually with Medicaid members through alerts, reminders and some remote monitoring. Given the timing of both the development of the HIE and the Replacement MMIS, an effective technical architecture for both applications must consider this as a requirement.

As the Arkansas Medicaid establishes appropriate contracts for the network and system design for their MMIS infrastructure, continued coordination with the HIE project will be vitally important to ensure that all the resources available to the state are utilized efficiently.

Public Health

The Arkansas Department of Health (ADH) serves as the public health entity in the state. The collaboration of public health and Arkansas HIE project requires specific coordination in order for meet the currently defined meaningful use criteria for public health. In order to maximize the investment made to date by ADH and to maximize utilization of the planned state HIE system; public health's participation in the Arkansas HIE is vitally important. The development of public health centric use cases have been undertaken in order to demonstrate how the HIE can assist in the coordination of the required meaningful use criteria such as;

- Generate lists of patients by specific conditions to use for quality improvement, reduction, of disparities and outreach
- Capability to submit electronic data to immunization registries and actual submission where required and accepted
- Capability to provide electronic syndromic surveillance data to public health agencies and actual transmission according to applicable law and practice
- Protect electronic health information created or maintained by the certified EHR technology through the implementation of appropriate technical capabilities



Currently, ADH has both state and federal reporting requirements which must be met. The Arkansas HIE can assist in developing coordinated transmission of appropriate data elements. As outlined in the process model, the HIE can provide the infrastructure to connect the entities transmitting and receiving the appropriate information in a secure environment. The utilization of a staged process for

deployment of the state's HIE system will assist the public health sector in meeting meaningful use criteria and maximize their current resources and capabilities. Additionally, the planned system can contribute to the population level healthcare quality efforts that can enhance the services provided by public health.

Leveraging Existing HIE Capacity

In order to leverage the funding provided to implement and/or expand the adoption of statewide Health Information Technology (HIT) and HIE, Arkansas will coordinate all related activities underway. Currently, key stakeholders in Arkansas have received funding or in the process of applying for funding in the areas of Broadband expansion, Regional Extension Center, workforce enhancement and Beacon Community. These stakeholders have been engaged in the Arkansas HIE project and serve as HIT Taskforce members and members of the working groups established to develop the design of the proposed state HIE system. Additionally, a workgroup focused on the integration of HIT/HIE related projects serve as the mechanism for maintaining coordination of efforts to maximize the available or to become available funding.

Funding has been procured in the areas listed below:

- **Broadband**

To enable providers and the public alike to move rapidly, effectively, and efficiently towards achieving meaningful use of electronic health records, the HIE system, which will be deployed throughout Arkansas, will be complimented and coordinated by Connect Arkansas. Connect Arkansas is a part of the governor's broad based strategy to address broadband

technology use and education throughout the State. More specifically, upon statewide deployment, the organization has committed to coordinating its educational initiatives alongside that of the HIE system.

- ***Regional Extension Center***

Arkansas's Regional Extension Center (REC) was awarded to the Arkansas Foundation for Medical Care (AFMC), and will provide the integral foundation for provider practices throughout the State to implement meaningful use of electronic health records (EHR) through software and service purchase, provision, and technical support. Partnering closely with AFMC is the University of AR Medical Sciences system, which will knit telemedicine and HIT/HIE practices into the academic preparation of the physician and allied health professionals of the future.

Achieving Interstate HIE and Connecting to the NHIN

The technical infrastructure of Arkansas HIE will ensure the AR HIE will be scalable, interoperable, standards-based and will meet federal National Health Information Network (NHIN) operational requirements. Arkansas's goal is to provide the foundation for adopting and implementing federal standards and to provide a structured mechanism to ensure health and medical systems adhere to the federal standards and accurately communicate with the AR HIE. With all states required to participate in the NHIN, this will serve as the foundation for developing strategies to meet interstate health information exchange.

Acquiring and Maintaining State Human Resources

Operational Staffing

The Office of Health Information Exchange will be at the center of the State's efforts to support and maintain the HIE network. The HIT Coordinator will provide leadership to this office while representing the State of Arkansas as an ex-officio member of the HIE Council and, eventually, the HIE Board. Staffing will be provided using the State's Human Resources advertising and hiring procedures. This process will draw on a wide spectrum of stakeholder experience and subject matter expertise from throughout the State. Staffing will consist of managers and staff to support the office's efforts in the following functional areas:

1. **Compliance:** This area will be responsible for ensuring the HIE network's continued compliance with Federal and State privacy and security laws (for example, HIPAA and GINA)
2. **Medical Coordination:** This area will be responsible for defining and coordinating the collaborative efforts between medical providers, public health, and quality initiatives
3. **Financial:** This area will be responsible for grant management, billing, general accounts receivable and payable, and necessary financial reporting. At least initially, these functions will be provided by the State of Arkansas Department of Finance and Administration.

4. Operations: This area will be responsible for overseeing the operational functions of the SHARE network to include managing any contractual relationships, ensuring proper training is provided on the use of the network, and facilitate technical support for the SHARE network. Many of these functions may be contracted out to a third party vendor but this area will be responsible for managing the vendors.
5. Administrative: This area will be responsible for the administrative tasks required to support the HIE Council/Board, the office staff, and communications with stakeholders. Many of the human resource functions will be provided either by a parent entity or through a Service Bureau Support Agreement with the State of Arkansas Department of Finance and Administration.

Staffing levels for each area have not been determined at this time but adequate staff will be developed as decisions are made as to which functions will be directly performed by the Office of HIT and which will be completed through contracts.

Technical Support

The Office of Health Information Exchange will be responsible for maintaining the SHARE network and facilitating secure interconnectivity for stakeholders. The goal for the SHARE network is to provide a high level of availability to all end users during the hours of operations. Many of these functions will be contracted out with the office providing contract management and functional oversight. These functions include:

1. Analysis of stakeholder systems in regards to connectivity to the SHARE network
2. Ensuring the ongoing technical security of the network
3. Collaboratively troubleshooting connectivity issues with stakeholders' technical resources
4. Maintaining the Master Patient Index, Record Locator Service, and the secure messaging components of the network
5. Procuring and maintaining appropriate hardware to ensure the sustainability of the network
6. Developing appropriate contingency and disaster recovery plans to ensure a viable system
7. Ensuring end users are provided with appropriate technical training and resources to successfully utilize the network

Training

In order to maintain and sustain a statewide HIE, education and training must be a component of HIE adoption. Activities currently underway in the state will assist in the development of appropriate training to ensure a prepared workforce exists not only for the establishment of HIE but also for the healthcare system workforce to expand the support of an electronic environment.

The Regional Extension Center (REC) and other ARRA funded program within the state and external partners will employ various mechanisms for providing the necessary support. The REC, with the direct support of the State's major healthcare stakeholders, will serve as the "on the ground" frontline to secure provider buy-in and assistance in EHR adoption and implementation to achieve improved quality, efficiency, and continuity of care. The REC will also provide training to existing healthcare professionals and their staff to ensure competency.

External resources include an REC providing regional support to the Arkansas area by working with Arkansas Community Colleges to provide an appropriate HIE/HIT focused curriculum. Their plan involves cooperation with community colleges to: support and guide health care providers regarding the implementation and management of healthcare information technology; and support the implementation of Electronic Medical Records in physician and other health care practices.

Vendor Management

The Office Health Information Exchange will follow the State's procurement rules and regulations to develop Requests for Proposals for any contracted services. Guidance will be provided by the State of Arkansas Department of Finance and Administration Office of State Procurement to ensure an appropriate competitive process is used during the development and award of contracts.